

DETAILED ACTION

1. This action is in response to Applicant's submission filed 1/4/2010, responding to the 9/3/2009 Office action which detailed the rejection of claims 1-34 and 36-44. Claims 1 and 24 have been amended. Claims 1-34 and 36-44 remain pending in the application and have been fully considered by the examiner.

Response to Amendment/Arguments

2. The amendments to claims 1 and 24 have obviated the related grounds of rejection under 35 U.S.C. § 112, second paragraph, with respect to the term "significantly." However, no amendments were provided with respect to the term as recited in claims 14 and 34. Also, additional issues remain under 35 U.S.C. § 112, second paragraph, as explained below. Therefore, the rejection is maintained.

3. At the top of page 14 filed 1/4/2010, Applicant essentially argues that in the 4/22/09 decision, the Board of Patent Appeals and Interferences explain that the claims did not recite a step of "determining," and accordingly, the step of determining cannot be the same as the step of identifying. While Applicant has not provided a specific citation to the associated portion of the 1/4/2010 decision, it is presumed that Applicant is referring to the decision at the top of page 7. Review of the associated paragraph on page 6 of the decision, shows that the Board was responding to Appellant's argument that the invention allows determination of a location for insertion of power-down instructions. In this context, the Board has distinguished the determination of locations from the selection of locations. However, this does not suggest that the Board has determined that the originally filed specification provides a description of such

determination. To the contrary, and in line with Applicant's reasoning, this suggests any description of such claimed "selecting" steps does not also provide a description of any claimed "determining" steps. The issue remains regarding a description of such a "determining" step in the originally filed specification in terms of 35 U.S.C. § 112, first paragraph.

Applicant cites the specification page 6 lines 8-11 and page 11 lines 1-5 in support of the claimed "determining" step. It is noted that the "determination" on page 6 line 10 is described with respect to a determination of functional units, and not with respect to locations in computer code, as claimed. Also, page 11 lines 1-5 merely describes energy profiling such that "Energy profiling will associate with each of the identified potential locations (*OFF* edge) and will predict the energy savings that can be obtained if the functional unit *U* is switched at that *OFF* edge." This passage does not clearly provide a description of any "determining" of locations as claimed. If the passage can be interpreted as "determining," then it is a determination of a prediction of energy savings, and not particularly any determination of potential locations at which power-down instructions can be inserted, as generally claimed. As such, Applicant's argument is not persuasive since the cited passages do not appear to provide support for the claimed step of "determining."

Near the top of page 15 filed 1/4/2010, Applicant argues that the specification provides a description of power consumption optimization on page 1 lines 12-15. However, the cited passage merely describes the broad concepts of power efficiency and energy conservation. The cited passage does not appear to provide a description of power reduction and optimization as generally claimed. It is noted that Applicant provides a scenario of maintaining a constant level of power consumption while using a greater number of components. However, Applicant has

not pointed to where such a scenario is described in the specification. Also, the premise of the scenario requires that the power consumption level remains constant. Power consumption cannot simultaneously be constant and reduced. In this respect, Applicant's argument is not persuasive.

Near the bottom of page 15, Applicant essentially argues that the steps of selecting and optimizing, and reducing and optimizing have been distinguished by the Board as being separate, and therefore there is no basis for the rejections under 35 U.S.C. § 112, second paragraph. However, even if the concepts are distinguished from each other, it does not suggest that they can be separated. While the Board may make a distinction between the elements, the lack of a description in the specification raises the question of whether such steps can be regarded as separate. For example, in the reduction/optimization scenario presented on page 15 of the 1/4/2010 amendment, Applicant suggests that optimizing power consumption is accomplished through a per component power reduction. Thus, according to Applicant's scenario, optimization cannot be accomplished without reduction. However, as claimed, they are separate steps. Thus, the Board's decision does not clarify the claimed limitations, and the rejection is maintained.

On pages 15-16, Applicant argues that the term "significantly" is not indefinite. However, Applicant has not explained how one of ordinary skill would determine whether execution time has been significantly increased. Is a 50% increase significant? 10%? 1%? Applicant has not explained how one of ordinary skill would come to such a conclusion. Without any clear description in the specification, the amount is impossible to determine. The rejection is maintained with regard to claims 14-23, 34, and 36-44.

In view of the § 112 issues raised by applicants' previous amendments as discussed below, the rejections under § 103(a) remain withdrawn. *See In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962) (a rejection under 35 U.S.C. § 103 should not be based on considerable speculation about the meaning of terms employed in a claim or assumptions that must be made as to the scope of the claims).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-34 and 36-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicants have previously amended independent claims 1, 14, 24, and 34 to recite separate steps of: analyzing the one or more potential locations; determining one or more specific locations at which power-down instructions can be inserted; and optimizing the power consumption during execution. However, the claims previously recited, and still recite, separate steps of selecting locations to insert the power-down instructions based on reducing power consumption and satisfying constraints. The original disclosure does not appear to distinguish the acts of analyzing/determining locations to insert power-down instructions from the acts of

identifying/selecting locations to insert power-down instructions such that these acts may be claimed as independent steps within the same process. Likewise, the specification does not appear to describe the reducing of power consumption while satisfying constraints as being distinguishable from the act of optimizing power consumption to support these as separable concepts within a single method.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-34 and 36-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As noted above, the original disclosure does not appear to distinguish the acts of analyzing/determining locations to insert power-down instructions from the acts of identifying/selecting locations to insert power-down instructions such that these acts may be claimed as independent steps within the same process. Likewise, the specification does not appear to describe the reducing of power consumption while satisfying constraints as being distinguishable from the act of optimizing power consumption to support these as separable concepts within a single method. Because these additional claim features appear to be redundant expressions of steps already in the claims, it is unclear whether or not they are intended to represent additional independent acts or somehow further refine to previously recited acts in any meaningful way. This ambiguity in the number and nature of the independent steps in the prescribed methods renders the claims indefinite.

Additionally, the term "without significantly increasing execution time" in claims 14 and 34 is a relative term which renders the claim indefinite. The term "significantly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES RUTTEN whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Derek Rutten/
Primary Examiner, Art Unit 2192